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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,277	11/26/2003	Kei Miyoshi	0171-1043P	5460
2292	7590	12/01/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MOORE, MARGARET G	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/721,277

Applicant(s)

MIYOSHI, KEI

Examiner

Margaret G. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 to 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 to 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 to 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Legrow et al.

Legrow et al. teach curable compositions that contain a silicone resin having alkenyl groups (component (a) on lines 15-18 of column 2), an SiH containing crosslinking agent (component (b) on lines 50 to 60 of column 2) and a catalyst (component (c) on the top of column 3). This meets each claimed component (A), (B) and (C) in claim 1. Column 4, lines 12 to 16, teaches that the composition is cured upon heating (instant claim 2).

With regard to the phrase “for LED devices” this is a future intended use clause that does not lend any patentable weight to the claimed composition per se. On the other hand the composition of Legrow et al. is used for encapsulating electronic equipment (column 4, lines 16 to 21), which indicates the suitability of this composition for LED devices.

For claim 3, note Example 1 which uses a resin meeting the formula (1) as shown. This also meets formula (1-1) in claim 4. Example 1 also uses a SiH resin meeting formula (2) in claim 3, as well as the phenyl content in claim 5. This example uses the components in amounts that meet claim 3.

Thus each requirement of particular claims 3 to 5 is met by the working example. The Examiner notes that this does not specifically teach that the alkenyl containing silicone resin meets the viscosity requirement of claim 3, but the resin in the working examples inherently does. The Examiner bases this position of inherency on the fact that column 2, line 32, of Legrow et al. teaches that the alkenyl silicone resin therein is “essentially the same as” that described in Mink et al. '519, and the silicone resin in Example 1 is the same as that used in

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the examples in Mink et al. Mink et al. teach on column 2, lines 18, that these resins are solid. Thus the skilled artisan would recognize that the silicone resins in Legrow et al. are solid and meets the viscosity and "liquid or solid" requirement in claim 3. The Examiner notes that she relies upon Mink et al. only to support her position of inherency.

3. Claims 1 to 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Eguchi et al.

Eguchi et al. teach organosiloxane resin compositions. See for instance components A and B on column 2, lines 1 to 15, as this meets the requirements of (A) and (B) in instant claim 1. Column 4, lines 9 and 10, teaches Pt catalysts. This anticipates claim 1.

Particular attention is drawn to the example starting on line 15 of column 6. This prepares a composition containing a siloxane meeting formula (1) in claim 3 (including the alkenyl, viscosity and "n" requirements), siloxane meeting formula (2) in claim 3 (including the "a+b" and viscosity requirements) and a Pt catalyst that cured by heating. This meets each requirement of claims 2 and 3.

With regard to claim 4, note the specific formula shown on column 5, lines 57 to 60. With regard to claim 5, note the specific formula shown on column 5, lines 61 to 63.

As noted supra, the phrase "for LED devices" is a future intended use that does not lend any patentable weight to the claims.

4. Claims 1 to 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al.

Sato et al. teach a silicone composition that is used to coat light emission photodiodes (meeting the future intended use of the claimed composition). See column 8, lines 13 and 14. This composition contains components a., b. and c. that meet claimed (A), (B) and (C). See line 52 of column 1 through line 7 of column 2. See for instance Example 2 starting on the bottom of column 9. This

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uses a siloxane resin meeting formula (1) in claim 3 as well as the further limitations of claim 4. It also includes, as component (b) and component (b'), a SiH containing siloxane that meets the requirements of formula (2), as well as the phenyl content in claim 5. Note that the epoxy substituted group in compound (b) is within the breadth of the instant claims because R' can be a substituted or unsubstituted group. The composition is heat cured. Thus Example 2 meets each requirement of claims 1 to 5.

5. For the record the Examiner notes that the art is replete with compositions meeting instant claims 1 and 2 and, to a lesser extent, claims 3 to 5 (since claims 3 to 5 are more narrow than claim 1). More references have not been applied against the claims to avoid redundancy, but applicants' attention is directed to the teachings in Mink et al., '519 and '567 (column 1, lines 45 to 65 in the former, column 1, lines 45 to 62 in the latter).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al.

Sato et al. fails to show a blend of siloxanes meeting the phenyl requirements in claim 6. For instance Example 2 uses a blend of siloxanes in which one has no phenyl groups and one having 10 mol% phenyl groups (components (b) and (b') respectively). Column 6 teaches various siloxanes that can be used as component b'. Of the five shown, the first one is used in Example 2. The second one shown meets the requirement of at least 15 mol% phenyl groups.

It would have been well within routine experimentation for one having ordinary skill in the art to use the second b' compound shown on column 6 in

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place of the first b' compound shown on column 6 since these siloxanes are taught as being functionally equivalent in this composition as a secondary crosslinking component. It is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. The express suggestion to substitute one equivalent for another need not be present to render the substitution obvious.

Since it would have been obvious to use a siloxane having 25 mol% phenyl groups in combination with the b compound in Example 2, this claim is rendered obvious.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eguchi et al.

Eguchi et al. also fail to show a blend of siloxanes meeting the phenyl requirements in claim 6. The bottom of column 5, however, teaches preferred silicone compositions. Compositions 1) and 2) use SiH siloxanes having less than 15 mol% phenyl groups. Composition 3) uses an SiH siloxane having greater than 15 mol% phenyl groups.

It would have been well within routine experimentation for one having ordinary skill in the art to use the SiH siloxane in composition 3) in combination with an SiH siloxane of composition 1) or 2). For instance, as noted supra, it is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. Using a blend of two different siloxanes that are indicated as being functionally equivalent is comparable to substituting one for another. On the other hand, it is prima facie obvious to combine two compositions, each of which is taught by prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea for combining said compositions flows logically from their having been individually taught in the prior art. In the instant case, this

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would mean that it would have been obvious to combine two SiH siloxanes, which are taught by the prior art as being useful for the same purpose, to form a third SiH siloxane composition to be used for the same purpose.

In this manner it would have been obvious to combine an SiH siloxane having a phenyl content of above 15 mol% with an SiH siloxane having no phenyl groups in a curable composition. As such the skilled artisan would have found the requirement of claim 6 obvious.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Margaret G. Moore  
Primary Examiner  
Art Unit 1712

mgm  
11/26/04